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SEQUENCE LISTING

<110> Wolosker, Herman
Takashashi, Maasaki
Mothet, Jean-Pierre
Ferris, Christopher
Snyder, Solomon

<120> Mammalian Serine Racemase

<130> 001107.00171

<160> 11

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 1018

<212> DNA

<213> Mus musculus

<400> 1

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cttaatgcca tcagaggctt aattcctgac acgccagaag agaagcccaa agccgtagtt      240
actcacagca gcggaaacca tggccaagct ctcacctatg ctgctaaact ggaaggaatt      300
cctgcttaca ttgtggttcc ccaaacagct cccaactgca agaaactggc aatccaagcc      360
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agaattatgc aagaaacaga aggcattctg gtccatccca accaggagcc tgcagtgata      480
gctggacaag gaacaattgc cctggaagtg ctgaaccagg ttcccttggt agatgactg      540
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gtctctccag aagtaaagaa cgtctgcatt gtactcagtg gggggaatgt agacctaac      960
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<210> 2

<211> 608

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(608)

<221> misc_feature

<222> (1)...(608)

<223> n = A,T,C or G

<400> 2

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ccattttgaa tcaactaaca gggcgcaatc ttttcttcaa atgtgaactc ttccagaaaa 180
caggatcttt taagattcgt ggtgctctca atgccgtcag aagcttggtt cctgatgctt 240
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cctatgctgc caaattggaa ggaattcctg cttatattgt ggtgccccag acagctccag 360
actgtaaaaa acttgcaata caagcctacg gagcgtcaat tgtatactgt gaacctagtg 420
atgaagtcca gagaaaatgt tgcaaaaagg agttacagaa gaaacagaag gcatcatggt 480
acatcccaac caggaacctg cagtgatagc tggacaaggg acaattgcc tgggaagtgt 540
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<210> 3

<211> 509

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(509)

<223> n = A,T,C or G

<400> 3

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tgaaattaag tgtgcaaccc agctgggtgt ggagaggatg aaactactca ttgaacctac 180
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ggaaatggtg ggaattcagt gtcttttagat actgaagaca ttttgtttcc tagtattgtc 420
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<213> Mus musculus

<400> 4

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<210> 5

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<212> DNA

<213> Mus musculus

<400> 5

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 <212> PRT
 <213> Rat rattus

<400> 6

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 Gln His Phe Gln Thr Val Ser Pro Glu Val Lys
 20 25

<210> 7
 <211> 25
 <212> PRT
 <213> Rat rattus

<400> 7

His Leu Asn Ile Gln Asp Ser Val His Leu Thr Pro Val Leu Thr Ser
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 Ser Ile Leu Asn Gln Ile Ala Gly Arg
 20 25

<210> 8
 <211> 339
 <212> PRT
 <213> Mus musculus

<400> 8

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 35 40 45
 Phe Gln Lys Thr Gly Ser Phe Lys Ile Arg Gly Ala Leu Asn Ala Ile
 50 55 60
 Arg Gly Leu Ile Pro Asp Thr Pro Glu Glu Lys Pro Lys Ala Val Val
 65 70 75 80
 Thr His Ser Ser Gly Asn His Gly Gln Ala Leu Thr Tyr Ala Ala Lys
 85 90 95
 Leu Glu Gly Ile Pro Ala Tyr Ile Val Val Pro Gln Thr Ala Pro Asn
 100 105 110

Cys Lys Lys Leu Ala Ile Gln Ala Tyr Gly Ala Ser Ile Val Tyr Cys
 115 120 125
 Asp Pro Ser Asp Glu Ser Arg Glu Lys Val Thr Gln Arg Ile Met Gln
 130 135 140
 Glu Thr Glu Gly Ile Leu Val His Pro Asn Gln Glu Pro Ala Val Ile
 145 150 155 160
 Ala Gly Gln Gly Thr Ile Ala Leu Glu Val Leu Asn Gln Val Pro Leu
 165 170 175
 Val Asp Ala Leu Val Val Pro Val Gly Gly Gly Gly Met Val Ala Gly
 180 185 190
 Ile Ala Ile Thr Ile Lys Ala Leu Lys Pro Ser Val Lys Val Tyr Ala
 195 200 205
 Ala Glu Pro Ser Asn Ala Asp Asp Cys Tyr Gln Ser Lys Leu Lys Gly
 210 215 220
 Glu Leu Thr Pro Asn Leu His Pro Pro Glu Thr Ile Ala Asp Gly Val
 225 230 235 240
 Lys Ser Ser Ile Gly Leu Asn Thr Trp Pro Ile Ile Arg Asp Leu Val
 245 250 255
 Asp Asp Val Phe Thr Val Thr Glu Asp Glu Ile Lys Tyr Ala Thr Gln
 260 265 270
 Leu Val Trp Gly Arg Met Lys Leu Leu Ile Glu Pro Thr Ala Gly Val
 275 280 285
 Ala Leu Ala Ala Val Leu Ser Gln His Phe Gln Thr Val Ser Pro Glu
 290 295 300
 Val Lys Asn Val Cys Ile Val Leu Ser Gly Gly Asn Val Asp Leu Thr
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 Ser Leu Asn Trp Val Gly Gln Ala Glu Arg Pro Ala Pro Tyr Gln Thr
 325 330 335

Val Ser Val

<210> 9
 <211> 1023
 <212> DNA
 <213> Homo sapiens

<400> 9

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 aatctttttct tcaaatgtga actctttccag aaaacaggat cttttaagat tcgtggtgct 180

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ctcaatgccg tcagaagctt ggttcctgat gcttttagaaa ggaagccgaa agctgttggt 240
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cctgcttata ttgtggtgcc ccagacagct ccagactgta aaaaacttgc aatacaagcc 360
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gctggacaag ggacaattgc cctggaagtg ctgaaccagg ttccttttgt ggatgcaactg 540
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taa 1023

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<210> 10
 <211> 340
 <212> PRT
 <213> Homo sapiens

<400> 10

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Met Cys Ala Gln Tyr Cys Ile Ser Phe Ala Asp Val Glu Lys Ala His
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Ile Leu Asn Gln Leu Thr Gly Arg Asn Leu Phe Phe Lys Cys Glu Leu
      35             40             45

Phe Gln Lys Thr Gly Ser Phe Lys Ile Arg Gly Ala Leu Asn Ala Val
      50             55             60

Arg Ser Leu Val Pro Asp Ala Leu Glu Arg Lys Pro Lys Ala Val Val
      65             70             75             80

Thr His Ser Ser Gly Asn His Gly Gln Ala Leu Thr Tyr Ala Ala Lys
      85             90             95

Leu Glu Gly Ile Pro Ala Tyr Ile Val Val Pro Gln Thr Ala Pro Asp
      100            105            110

Cys Lys Lys Leu Ala Ile Gln Ala Tyr Gly Ala Ser Ile Val Tyr Cys
      115            120            125

Glu Pro Ser Asp Glu Ser Arg Glu Asn Val Ala Lys Arg Val Thr Glu
      130            135            140

Glu Thr Glu Gly Ile Met Val His Pro Asn Gln Glu Pro Ala Val Ile
      145            150            155            160

Ala Gly Gln Gly Thr Ile Ala Leu Glu Val Leu Asn Gln Val Pro Leu
      165            170            175

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Val Asp Ala Leu Val Val Pro Val Gly Gly Gly Gly Met Leu Ala Gly
180 185 190

Ile Ala Ile Thr Val Lys Ala Leu Lys Pro Ser Val Lys Val Tyr Ala
195 200 205

Ala Glu Pro Ser Asn Ala Asp Asp Cys Tyr Gln Ser Lys Leu Lys Gly
210 215 220

Lys Leu Met Pro Asn Leu Tyr Pro Pro Glu Thr Ile Ala Asp Gly Val
225 230 235 240

Lys Ser Ser Ile Gly Leu Asn Thr Trp Pro Ile Ile Arg Asp Leu Val
245 250 255

Asp Asp Ile Phe Thr Val Thr Glu Asp Glu Ile Lys Cys Ala Thr Gln
260 265 270

Leu Val Trp Glu Arg Met Lys Leu Leu Ile Glu Pro Thr Ala Gly Val
275 280 285

Gly Val Ala Ala Val Leu Ser Gln His Phe Gln Thr Val Ser Pro Glu
290 295 300

Val Lys Asn Ile Cys Ile Val Leu Ser Gly Gly Asn Val Asp Leu Thr
305 310 315 320

Ser Ser Ile Thr Trp Val Lys Gln Ala Glu Arg Pro Ala Ser Tyr Gln
325 330 335

Ser Val Ser Val

<210> 11
<211> 1672
<212> DNA
<213> Mus musculus
<400> 11

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| cagaattttt | tgaactgaaa | ttgagagaga | atccctcttc | agtatggaag | ccataaaatg | 120 |
| taaaacacag | gagctgtcag | cagccatgtg | tcctgcagta | cggagccagc | tggtctgctg | 180 |
| tgagaaggaa | gccgccgtgc | cagaggcagc | agagaaccat | gtgtgctcag | tactgcatct | 240 |
| cctttgctga | tgttgaaaaa | gctcatatca | acattcaaga | ctctatccac | ctcaccccag | 300 |
| tgctaacaag | ctccattttg | aatcaaatag | cagggcgcaa | tcttttcttc | aaatgtgagc | 360 |
| tcttcagaaa | aactgggtct | tttaagattc | gaggtgccct | taatgccatc | agaggcttaa | 420 |
| ttcctgacac | gccagaagag | aagcccaaag | cctagattac | tcacagcagc | ggaaaccatg | 480 |
| gccaaactct | cacctatgct | gctaaactgg | aaggaattcc | tgcttacatt | gtggttcccc | 540 |
| aaacagctcc | caactgcaag | aaactggcaa | tccaagccta | tggagcatcg | atagtatact | 600 |
| gtgacccaag | tgacgagtc | agagaaaagg | tactcaaag | aattatgcaa | gaaacagaag | 660 |
| gcattcttgt | ccatcccaac | caggagcctg | cagtgatagc | tggacaagga | acaattgccc | 720 |
| tggaagtgtc | gaaccagggt | cccttggtag | atgcactggg | ggtaccagta | ggaggaggag | 780 |
| gaatggttgc | tggaaatagc | attacaatta | aggccctgaa | acctagtgtg | aagggtatacg | 840 |
| ctgctgagcc | ctcgaatgca | gatgactgct | accagtctaa | actgaaagga | gaactgaccc | 900 |

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| ccaatcttca | tctccagaa | accatagcag | atggtgtcaa | atccagcatt | ggcttgaata | 960 |
| cctggcctat | tataagagac | cttgtggatg | atgtcttcac | tgtcaccgaa | gatgaaatca | 1020 |
| agtatgcaac | ccagctggtg | tgggggagaa | tgaaactgct | cattgagccg | actgctggcg | 1080 |
| tggcactggc | tgcagtgtg | tctcagcatt | tccaaacagt | ctctccagaa | gtaaagaacg | 1140 |
| tctgcattgt | actcagtggg | gggaatgtag | acctaacctc | cctgaactgg | gtggggcagg | 1200 |
| ctgaacggcc | agctccttac | cagacggtct | gtttaaattc | aggcaagatt | gtctctagat | 1260 |
| gaaaattttg | tttccatctt | ccctttaaaa | attatgttca | aaatccta | gaagaaagt | 1320 |
| taagtaatca | tgtaaattct | gtacttagca | gagacatgga | caactgaaat | acagagcaca | 1380 |
| agctgcctgg | tcacaacca | gactccaaca | ctggagttt | ggttggttgc | agtagagaca | 1440 |
| gaaccaact | gagtctctta | ctccatgtct | acttcagaca | ctggtgaaga | gatgtcactt | 1500 |
| ttaaccaag | gtactggctc | tggtacatat | gggtcataag | tccacttggg | aaatactcgc | 1560 |
| ttatagagat | tcattaatac | tgtgtcctga | gatttcagct | ttcccatca | aaactgcact | 1620 |
| ttatatggcc | atgggtacct | aaaagttaaa | acagataatt | ggtcaaaaat | | 1670 |